Universidad de Alcalá

WALKER FOR THE MOBILITY OF PEOPLE WITH MOTOR DISABILITY

Patent
ES1104783 U

Code

BIO_UAH_12

Application areas

- Information and Communication Technologies
- Other Industrial Technologies
- Biological Sciences

Type of Collaboration

- Technical cooperation
- Commercial agreement with technical assistance
- License agreementt

Main Researchers

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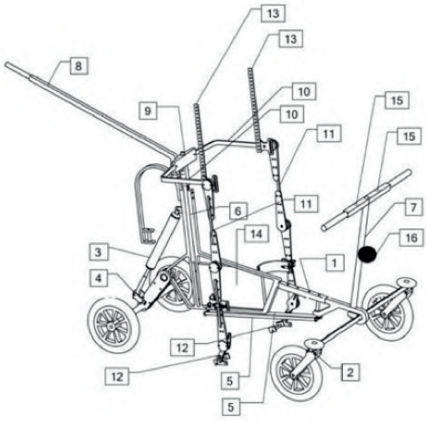

Figura 1

ABSTRACT

This walker includes a guide for the leg together with an electronic system that improves the user of manoeuvrability allowing the configuration of basic actions. Different machining processes and electronic development techniques are involved, supplementing its main functionality. The device of the invention consists of two different parts:

1) Wheeled structure providing stability
This structure has bars allowing the slippage of some elastics through them to facilitate reciprocal movement. This structure which provides the necessary stability has a support where the child is sitting. The walker can be adjusted to the child's height allowing to set different positions and to adapt to different user weights. The structure also carries a front bar where the child can support the hands and another one in the back allowing the adults take the child.

2) Harness with braces to support the child
Some braces are hanging from the harness allowing movements of feet, legs and hips. These articulated bars also support much of the children weight adapting the structure to their height in the growth stage.

ADVANTAGES AND INNOVATIONS

- It is not necessary to perform exaggerated movements in the feet, because the walker contains a design modification transmitting the lateral displacement almost immediately to its structure, as well as a development based on flat pieces.
- Production more economic obtained by the construction of wheeled structure with flat surfaces: the pieces are cut by a flexible cut mechanism such as waterjet or laser, therefore the most of the pieces are flat and they do not need subsequent machining.
- This structure has bars allowing the slippage of some elastics through them to facilitate reciprocal movement. These bars are joined to the child's ankles in the anteriorly part and others placed higher in the rear part to facilitate this movement.